

4. REPORTING REQUIREMENTS

In general PA deliverables consist of three work products: data summary form, narrative report, and scoresheets.

4.1 PA DATA AND SITE CHARACTERISTICS FORM

A completed data and site characteristics form, "Potential Hazardous Waste Site Preliminary Assessment Form" (see Appendix D), is a standard product of every PA. The data form:

- ! Identifies and provides a place to record technical data to evaluate the site.
- ! Records administrative information to update and maintain CERCLIS.
- ! Records descriptive site information to update and maintain EPA's electronic database of characteristics of all CERCLIS sites (the CERCLIS Characterization Database).

The form can also function as a data collection tool, identifying all of the basic raw data required to score a PA. In addition, the form serves as a four-page summary of the PA scoresheets and narrative report, and as a mechanism to organize the information in a format compatible with data entry needs for CERCLIS and the CERCLIS Characterization Database.

Responses on the form need not be typed; legible handwriting is acceptable. When produce by PA-Score, EPA's computerized version of the scoresheets (Section 4.3.2), completion of the form can be simplified. PA-Score can print the data form and draw on the data entered during site scoring to automatically transcribe most of the required information. After printing the form, users then manually transcribe the missing data elements.

4.2 NARRATIVE REPORT

A narrative report is a standard product of every PA. The report should summarize what is known about the site and what is inferred or assumed, the activities conducted during the PA, and all information researched. Following Regional EPA guidelines, the report may be a letter report or may stand alone, transmitted under a cover letter. Factual statements in the report should be keyed, by number, to a supporting reference. References not generally available to the public should be attached to the report. As one of the references, include worksheets showing the determination of site latitude and longitude coordinates according to EPA's standard operating procedure (Appendix E).

The narrative portion of the report should be brief and written in plain English. Avoid using HRS terminology. Certain PA terminology, however, is acceptable. For example:

<u>Consider using:</u>	<u>Instead of:</u>
suspected release	observed release
primary target	actual contamination
secondary target	potential contamination
aquifer in use	aquifer of concern
4-mile radius	target distance limit
15-mile downstream distance	in-water segment

Table 4-1 presents an annotated outline of the PA report. Depending on the complexity of the site and the amount of information presented, typical narratives may range from 3 to 4 pages up to 8

to 10 pages in length (excluding attachments and references). The main body of the report is structured like the PA itself, beginning with site and source characterization, and moving logically through an examination of the threats and targets associated with each pathway. The "Summary and Conclusions" section should summarize the most important characteristics of the site, and identify major pathways and targets of concern.

To foster national consistency in the content of PA narratives and to aid the successful application of the national QC/QA program, both the structure and content of each PA report should follow the outline given in Table 4-1 as a minimum requirement. At Regional EPA discretion, additional information not identified in the outline may also be included. Appendix C presents an example PA narrative report for a fictitious site.

The narrative report plays a particularly important role as a vehicle for public information about the site and about the PA that was conducted. It is therefore important that it contain sufficient information and documentation to support EPA's decision-making process for site disposition. For a NFRAP site, this means convincingly demonstrating that further Superfund activity is not necessary. For a further action site, this means showing sufficient indications of a need for response -- which may take the form of emergency removal or an SI; in either case, the PA narrative provides the basis for next-step planning.

Note, however, that PA narratives should be restricted to factual statements. PA scores and site disposition recommendations, which EPA considers deliberative and potentially protected from disclosure, should not be stated in narrative reports. PA investigators should check with Regional EPA personnel to ensure that PA reports are consistent with current EPA policy on release of PA information.

Table 4-1
PA Narrative Report, Outline of Contents

INTRODUCTION

- ! State that a PA was performed, name the agency or organization performing it, and state the authority under which it was conducted (i.e., CERCLA as amended by SARA, and EPA contract or cooperative agreement). Include the site name, CERCLIS identification number, and location (street address, city, county, state).
- ! Briefly state the purpose of the PA (i.e., to assess the immediate or potential threat wastes at the site pose to human health and the environment and to collect information to support a decision regarding the need for further action under CERCLA/SARA) and the scope of the investigation (e.g., research and review file information, comprehensive target survey, and an offsite or onsite reconnaissance).

SITE DESCRIPTION, OPERATIONAL HISTORY, AND WASTE CHARACTERISTICS

- ! State brief directions to the site. Provide latitude/longitude coordinates. Identify the type of site (e.g., plating facility, chemical plant), whether it is active or inactive, and years of operation. Describe its physical characteristics (e.g., dimensions, size, structures, buildings, borders, drainage patterns), and setting (e.g., topography, local land uses). Include a USGS 7.5-minute base map locating the site and showing a 1-mile radius. On the map, identify the surface water drainage route; nearest well, intake, and residence; wetlands and other sensitive environments. Include a drafted site sketch showing features on and around the site.
- ! Provide an operational history of the site. Identify current and former owners and operators, and describe site activities. Identify and describe wastes generated, quantities, disposal practices, and source areas. Indicate source areas on the sketch. Describe any removals, whether conducted by facility operators or regulatory authorities.
- ! Describe past regulatory activities including permits, violations, and inspections by local, state, or Federal authorities. Present available analytical data in a table and discuss.

PATHWAY AND ENVIRONMENTAL HAZARD ASSESSMENT

Ground Water

- ! Describe the local geologic and hydrogeologic setting (e.g., stratigraphy, formations, aquifers, karst features, depth and permeability to the shallowest aquifer).
- ! On the basis of the site description, operational history, local geology and hydrogeology, and any available analytical data, state whether release of a hazardous substance from the site to ground water is suspected. If analytical data are available, summarize them in a table.
- ! Discuss ground water use within a 4-mile radius. Identify the nearest drinking water well and state the distance to it. Quantify drinking water populations served by wells within 4 miles. Differentiate between populations served by private wells and those served by municipal wells; identify blended systems. Identify drinking water wells suspected to be primary targets and quantify the populations associated with each.

Table 4-1 (continued)
PA. Narrative Report, Outline of Contents

PATHWAY AND ENVIRONMENTAL HAZARD ASSESSMENT (continued)

Surface Water

- ! Describe the local hydrologic setting, including site location with respect to floodplains, and the overland and downstream portions of the surface water migration path. State the distance from the site to the probable point of entry (PPE) to surface water. Identify the water bodies within a 15-mile downstream distance, and state the length of reach and flow characteristics of each. Include a drafted sketch of the surface water migration path.
- ! On the basis of the site description and operational history, local hydrology, and any available analytical data, state whether release of a hazardous substance from the site to surface water is suspected. If analytical data are available, summarize them in a table.
- ! Indicate whether surface water within a 15-mile downstream distance supplies drinking water. Identify each drinking water intake and state the distance from the PPE to the nearest intake. Quantify the drinking water population served by surface water and identify blended systems. Identify surface water intakes suspected to be primary targets and quantify the populations served by each.
- ! Indicate whether surface water along a 15-mile downstream distance supports fisheries. Identify each fishery and state the distance from the PPE to the nearest fishery; identify the fishery with the lowest flow characteristics. Identify fisheries suspected to be primary targets.
- ! Indicate whether sensitive environments are present in or adjacent to the surface water migration path (overland and along a 15-mile downstream distance). Identify each sensitive environment and state the distance from the PPE to the nearest; identify the sensitive environment with the lowest flow characteristics. Identify sensitive environments suspected to be primary targets.

Soil Exposure and Air

- ! Indicate the number of onsite workers and the number of people who live onsite or within 200 feet of areas of known or suspected contamination. Identify schools and day care facilities onsite or within 200 feet of areas of known or suspected contamination, and state the number of attendees. Quantify the populations (residents, students, and workers) within 4 miles of the site; state the distance to the nearest regularly occupied onsite or offsite building. Identify sensitive environments onsite and within 4 miles of the site. Discuss the likelihood of a hazardous substance being released to the air. If analytical data are available, summarize them in a table.

Table 4-1 (concluded)
PA Narrative Report, Outline of Contents

SUMMARY AND CONCLUSION

- ! Briefly summarize the major aspects of the site and its history that relate to the potential for releases of hazardous substances and the exposure of targets. Identify principal pathways and targets of concern. Discuss additional qualitative considerations or unusual circumstances that should be brought to the attention of Regional EPA site assessment personnel.

PHOTODOCUMENTATION LOG

- ! As an attachment, provide original photographs of the site and pertinent site features (e.g., waste source areas, stained soil, stressed vegetation, drainage paths) taken during the site reconnaissance. Provide a written description on the back of each photo, in captions, or in an accompanying text. Key each photo to its location on the site sketch.

REFERENCES

- ! Provide a numbered list, in bibliographic citation format, of all references cited in the PA report.
- ! Attach copies of references cited in the PA report. Include complete copies of site-specific references (e.g., USGS topographic quads, records of communication, drinking water population apportionment and calculation worksheets, GEMS and other database printouts, waste handling records or shipping manifests). Include only the title page and pertinent excerpts of general references (e.g., geologic reports, census reports, other publicly available documents).

4.3 PA SCORING

Section 3 provides detailed instructions to complete a standard set of PA scoresheets to promote national consistency in PA evaluations. A copy of the scoresheets is provided as Appendix A. A computerized scoring tool, "PA-Score," is also available from EPA ("PA-Score Software, Users Manual & Tutorial, Version 1," OSWER Directive 9345.1-11).

The PA scoresheets (and the PA-Score computer program) provide space to record reference numbers for each factor. The references and corresponding numbers should be the same as those cited in the PA narrative report (Section 4.2). Copies of the references are attached to the narrative and need not be included with the scoresheets.

To score analytical data from applicable sampling results (as a result of the site review, Section 5.3), complete the SI worksheets (see "Guidance for Performing Site Inspections Under CERCLA, Interim FY 1992"; OSWER Directive 9345.1-05). If the site review leads to the more detailed evaluation of ground water pathway potential to release (Section 5.4), include worksheets; explaining the evaluation along with additional ground water pathway and site summary scoresheets.

4.3.1 Scoresheets

The PA scoresheets contain checklists, worksheets, factor value tables, scoring forms, and brief instructions. The package functions as a self-contained workbook providing all of the basic tools to apply collected data and develop a PA score. Right-hand (numbered) pages contain the scoresheets, worksheets, and tables; left-hand (unnumbered) pages contain corresponding instructions. When photocopy duplicating scoresheets for multiple deliverable or file copies, it is only necessary to copy the right-hand pages.

PA scoresheets are available from EPA. Regional guidelines may recommend the use of other scoring materials. The standard PA scoresheets are considered the minimum scoring requirement; Regions, however, may require additional evaluations.

4.3.2 PA-Score

EPA developed the PA-Score computer program to automate PA evaluations. PA-Score facilitates scoring by assigning values from tables, performing calculations, and producing PA documentation. PA-Score shares the same basic design and structure as PREscore, EPA's software to calculate HRS scores during the SI. PA-Score requires no specialized computer experience or equipment beyond an IBM (or compatible) personal computer. From the data PA investigators provide on the data entry screens (which resemble the PA scoresheets), PA-Score performs all factor value table look-ups and mathematical calculations. A companion program, PA-Print, prints PA scoresheets, a reference log, and the PA data and site characteristics form. Users of PA-Score should submit a floppy diskette, along with hardcopy printout, as a deliverable.

4.4 ABBREVIATED REPORTING

Sites determined ineligible for CERCLA response by Regional EPA site assessment personnel, and purported sites that are determined not to actually exist, do not undergo a complete PA (see Section 2.2). For such sites, the typical PA reporting requirements are abbreviated.

A narrative report remains a requirement. The report, however, may be limited to the "Introduction," "Site Description, Operational History, and Waste Characteristics," and "Summary and Conclusions" sections outlined in Table 4-1. The narrative should present and fully support all of the information that led to EPA's decision to cease PA investigation at the site. As with a full PA report, factual statements within the narrative must be documented, and appropriate references or excerpts must be attached.

Only the first two pages of the PA data and site characteristics form (Appendix D) are required for abbreviated PA sites. These pages provide necessary administrative information and general descriptive information about the site and associated wastes (if any).

PA scoresheets (Appendix A) or computerized PA-Score site scoring need not be completed for abbreviated PA sites.

Note that these abbreviated reporting requirements apply only to "non-sites" that are determined to be nonexistent, and sites determined ineligible for CERCLA response. Lack of targets is not an acceptable reason to abbreviate either the PA investigation or the standard reporting requirements. Sites lacking targets must be fully documented by a complete narrative report, fully evaluated using either the PA scoresheets or PA-Score software, and summarized by a completed data and site characteristics form.